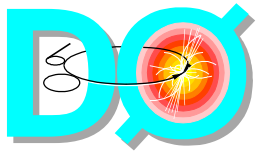


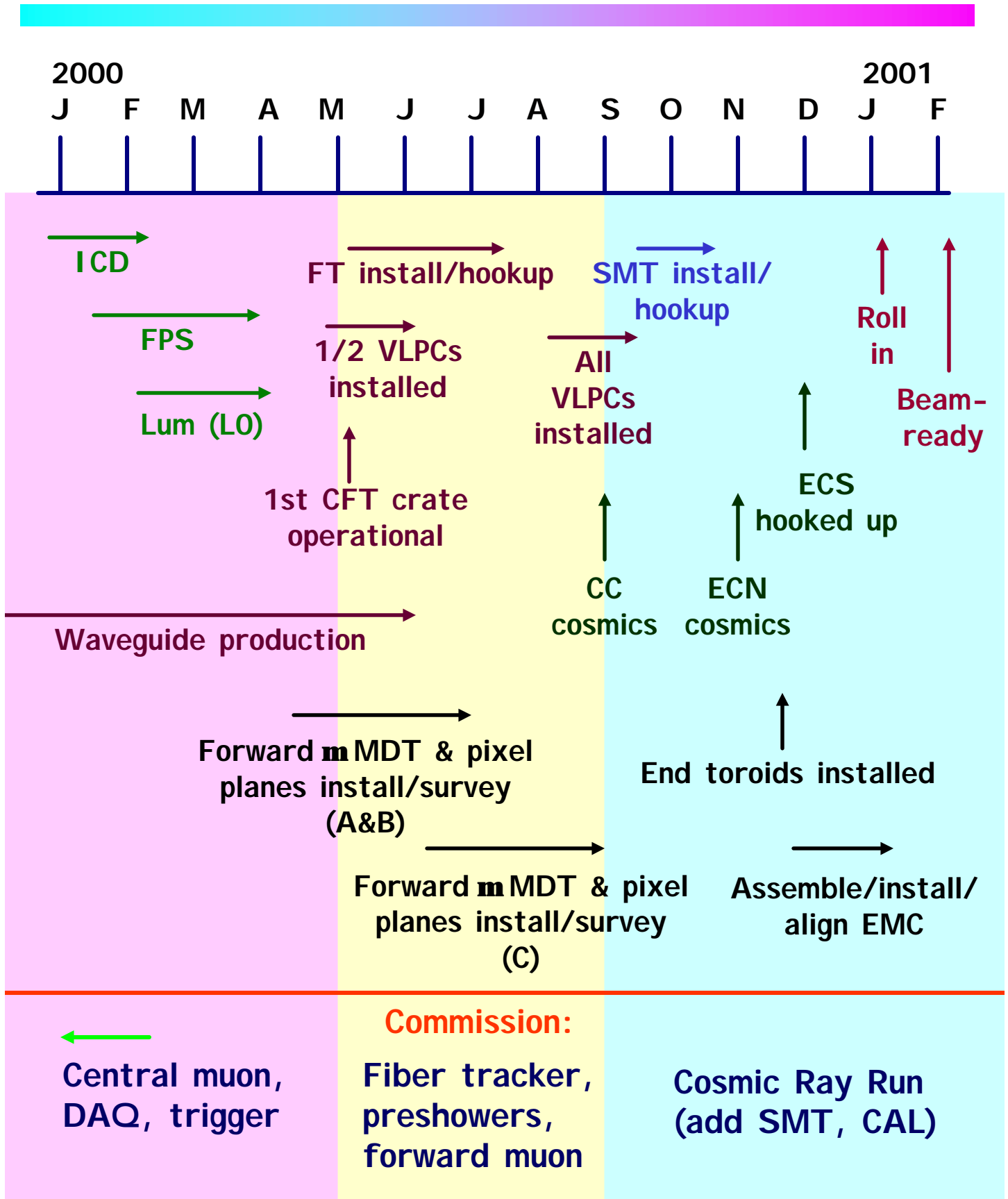
Installation and Commissioning of the DØ Detector

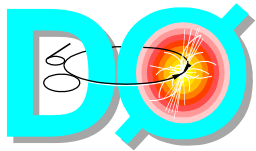
**Jon Kotcher
DØ Collaboration
Brookhaven National Laboratory**

**DoE Review
November 4, 1999**



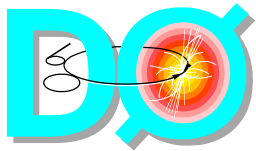
DZero Timeline





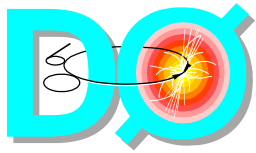
Near-term activities

- Cosmics in central muon PDT read out with much of Run 2 functionality:
 - * Muon Readout Card, VBD in Movable Counting House, data into Level 3 (or secondary path), histograms generated with EXAMINE
- Final prototype Serial Command Link successfully tested/integrated using CAL crate, Level 1
 - * Preparing for muon/tracker dual-crate readout
- Cosmic Ray test in Lab 3:
 - * Fibers, preshower production modules, VLPCs, test bed for final CFT prototype electronics
- Silicon 10% test progressing:
 - * EXAMINEs, Level 3 and offline unpacking, geometry database, monitoring & calibration, shipping data via ethernet to DAB
 - * 12 ladder test (cosmics)
- Installing final tracker front-end (sequencers, VRB, VTM) in DAB
 - * Will use DAQ, online EXAMINE & monitoring
- Beam pipe trigger + central muon in early 2000
 - * Reconstruction code on cosmic tracks
 - * Begin exercising event display

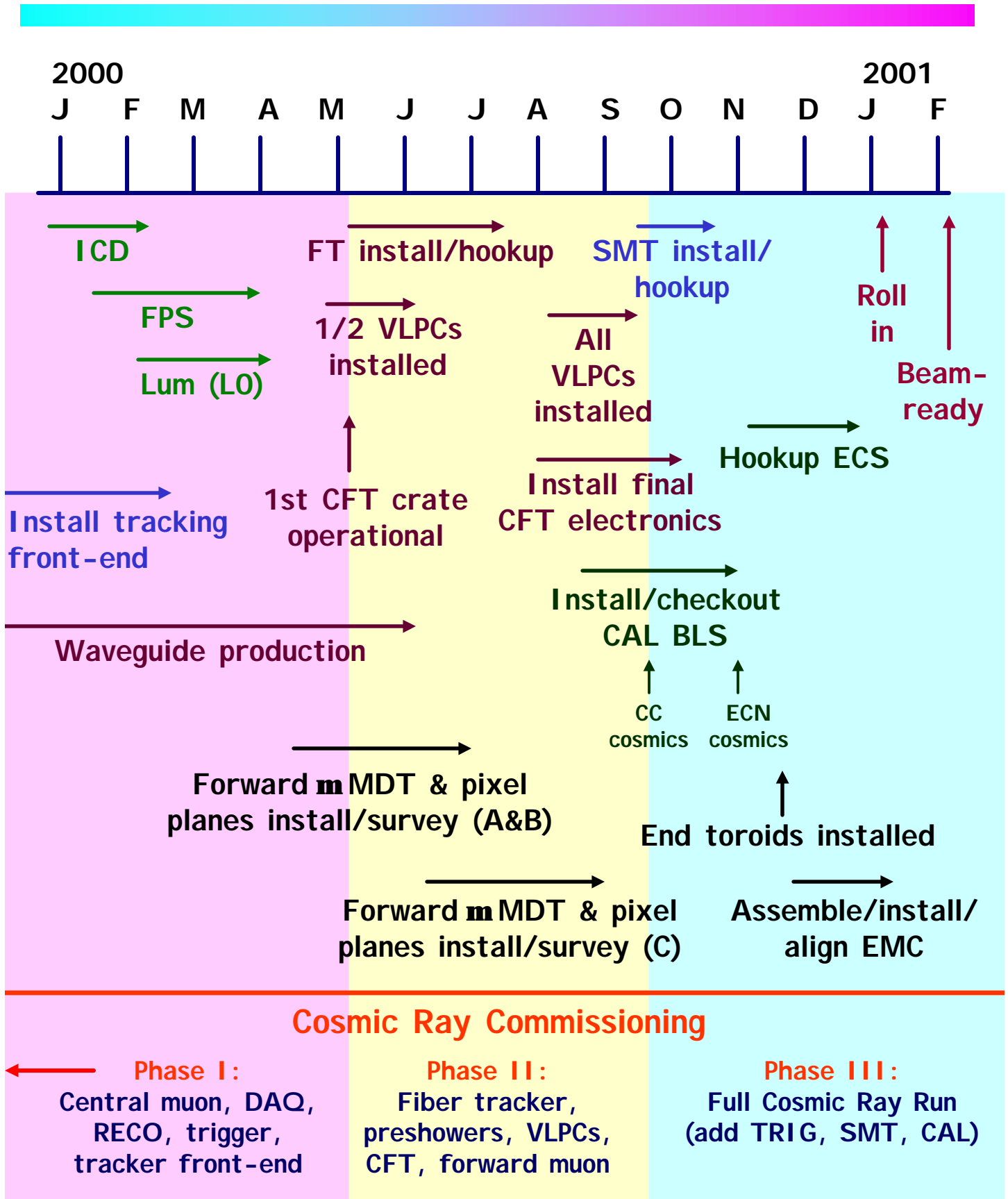


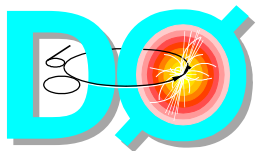
Closing remarks

- Installation sequence well understood, not much new
- Read out/integration of central muon, CAL crates continuing
 - * initial, benchmark systems - others bootstrapped from here
- Tracker front ends being commissioned
 - * 10% test, Lab 3 cosmic ray test
 - * installation in DAB
- Integrated commissioning schedule being developed:
 - * hardware-front ends-trigger-DAQ
 - * Collaboration workshops:
 - Online Workshop (Fermilab, June, 1999)
 - D0 Commissioning Workshop (Seattle, July, 1999)
 - Trigger Commissioning Workshop (NIU, Friday, October 22, 1999)
 - General Commissioning Workshop planned for late winter, 2000.



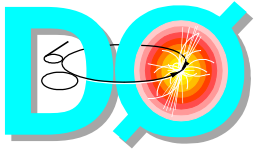
DO Timeline





Commissioning

- **Phase I** (present - May, 2000)
 - * Delivery/commissioning of Level 2,3 trigger frameworks
 - * Commissioning of central muon scintillator/PDTs
 - prototype for remaining systems
 - * Internal Collaboration Milestone: Feb 15, 2000
 - beam pipe scintillator to constrain cosmic tracks
 - reconstruction code on central muon cosmic rays
 - online event display
 - begin filtering in Level 3
 - online event, hardware monitoring
- **Phase II** (May, 2000 - Sep, 2000)
 - * Add fiber tracker, preshowers, VLPCs, CFT trigger/front-end
 - integrate trigger/readout of tracking scintillation detectors
 - * Forward muon pixels/MDTs being installed and commissioned
- **Phase III** (end Sep, 2000 - Jan, 2001)
 - * Cosmic Ray Run of full detector
 - add full trigger, SMT, CAL
 - linking of tracks/detectors
 - develop full online capability



Outline

- Installation sequence
- Commissioning and installation timeline
 - * Commissioning phases, milestones
- Near-term commissioning activities
- Conclusions